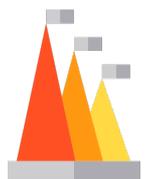


EOSDIS

NASA's Earth
Science Data
System



... ability to search over
34,000 Data Collections
in the CMR
(Common Metadata Repository)...

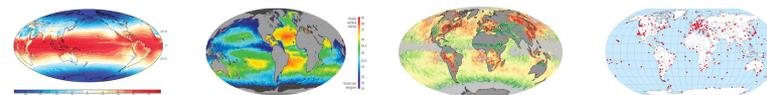


EOSDIS has over
22 Petabytes
of accessible *Earth
science* data ...

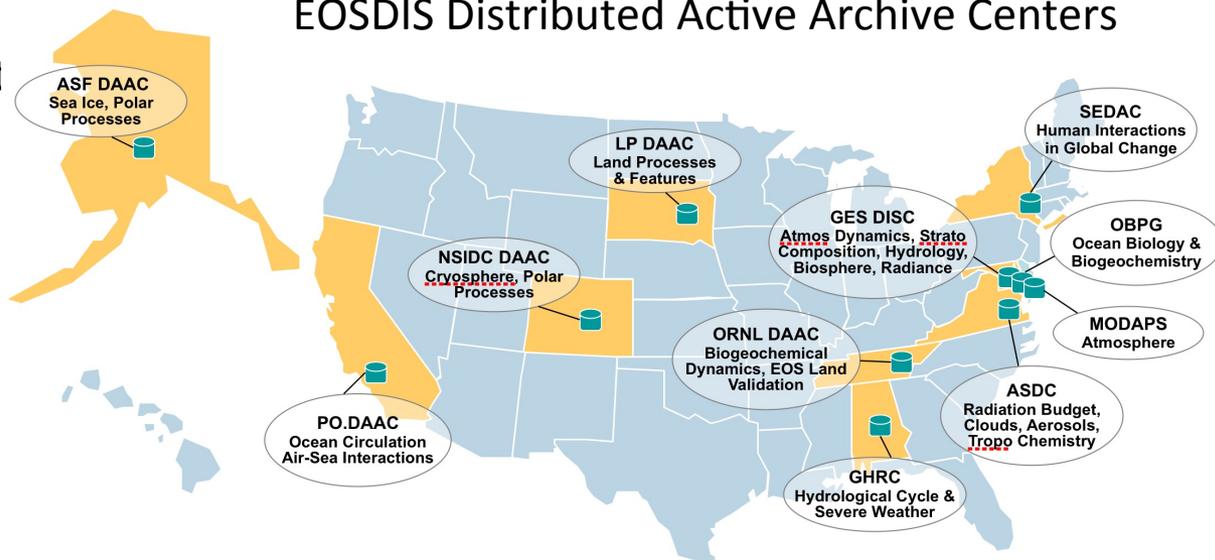
... of which 95% of
granule searches
complete in less than **1
Second**



EOSDIS delivered over
2 Billion data products
to over **2.6 Million**
science users from around t



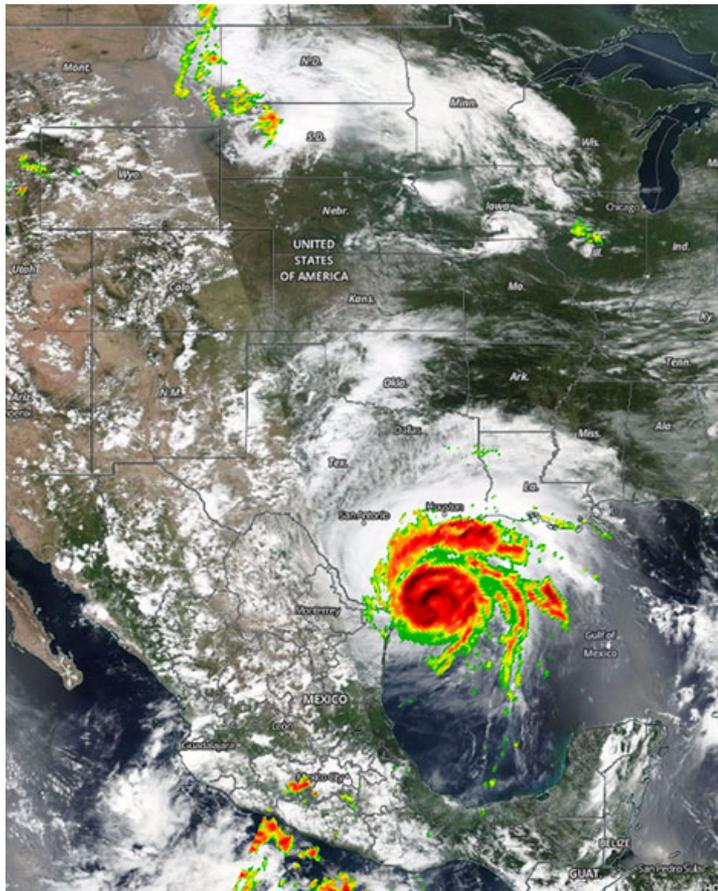
EOSDIS Distributed Active Archive Centers



... with over
392 Million
Science data files in the
repository ...

Evolving Storage Architectures

<https://worldview.earthdata.nasa.gov>



Rain Rate (Ascending) from GMI/GPM captured around 11:50 UTC (6:50AM CDT) on 25 August 2017, where Darker reds indicate higher rainfall rates, overlaid on a true color corrected reflectance image from VIIRS/Suomi NPP captured around 18:55 UTC (1:55 PM CDT).

- Since the 1990s, our architecture has been under continuous evolution, developing highly distributed systems to prepare for coming Petabytes/Exabytes of data
- What does this look like:
 - From loosely coupled with a common purpose to tighter coupling to support inter-disciplinary science
 - From nearline tape system in the 90s, to all systems on disks, and today an architecture that will take advantage of the commercial cloud
 - Basic metadata with 30 attributes in the 90s to complex metadata models of collections, services, DOIs, variables
 - Services to support users in days to now supporting them with near real time

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